

6. On a Collection of Lepidoptera from Nyasa-land presented to the Museum by Sir Harry Johnston, K.C.B., and collected by Mr. J. B. Yule. By ARTHUR G. BUTLER, Ph.D., F.L.S., F.Z.S., Senior Assistant-Keeper, Zoological Department, British Museum.

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(Plate XLIII.)

From the few notes as to exact localities which occurred on the envelopes it would seem that the present collection was obtained partly, if not altogether, on the Songwe plain, N.W. Nyasa, in 1895; but so very few of the specimens are accompanied by notes as to locality and date of capture, that I have not thought it advisable to burden the 'Proceedings' by repeating references to descriptions and figures, most of which have already been given in other papers on Nyasa Lepidoptera published in the Society's 'Proceedings.'

The collection contains examples of five new species and of a new form of a known species; but, in addition to these, there are several species of interest, such as the wet-season form of *Ypthima granulosa*; examples of the broad-bordered variety of *Charaxes saturnus*, to which I gave the name of *laticinctus*; a somewhat worn female example of the rare *Charaxes violetta*; the white variety of *Euridia mima*; additional examples of *Melacrenis crawshayi*; a curious variety of the female of *Alana nyassæ* having the base of the posterior wings white; both wet- and dry-season forms of *Teracolus opalescens*; the rare *Teracolus hillebrandtii*; a dry-season female of *Teracolus subfasciatus*, differing in its superior size, the larger apical orange patch on the primaries being without inner blackish limitation, and the under surface more strongly reticulated; both seasonal forms of *Teracolus emini*; the male of *Belenois diminuta*, showing that the latter is the dry-season form of *B. crawshayi*; a good series of *Papilio nivinar*, consisting entirely of males (as the only example which we possess of *P. taboranus* is a female, it seems probable that the differences in pattern and colouring between these two forms of *Papilio* are due to sex, in which case the name of *P. taboranus* will have to stand for the species); an example in good condition of a rare Hesperiid (*Cyclopides willlemi*), of which the Museum previously only possessed a broken example.

Among the Moths, the most interesting additions, apart from the new species, are two male examples of *Hibrildes norax*. Respecting *Hibrildes* we know very little at present: if the female resembles the male, no examples have hitherto been received; but it is possible that the sexes may be entirely dissimilar, and that my *Hibrildes crawshayi* may eventually prove to be the female

though at present we have not the least evidence in proof of such sexual incongruity. The genus is a Pterothysanid, and the few species of that group in which the sexes are known exhibit no marked sexual differences of pattern and coloration.

The following is a list of the species in this collection :—

## RHOPALOCERA.

1. *Limnas chrysippus*, *Linn.*, and var. *klugii*, *Butl.*
2. *Tirumala piteverana*, *Doubl.*
3. *Melanitis solandra*, *Fabr.*
4. *Samanta perspicua*, *Trimen.*
5. *Mycalasis ensirus*, *Hopff.*
6. — *ena*, *Hewits.*
7. *Physcænura piona*, *Godm.*, \* var. *lucida*, *Butl.*
8. *Ypthima granulosa*, *Butler.*
9. *Charaxes castor*, *Cramer*, var. *flavifasciatus*, *Butl.*
10. — *saturnus*, *Butler*, and var. *laticinctus*, *Butl.*
11. — *achemenes*, *Felder.*
12. — *guderiana* ♂, *Dewitz.*
13. — *phæus* ♂, *Hewits.*
14. — *violetta* ♀, *Grose Smith.*
15. — *tiridates* ♀, *Fabr.*
16. — *bohemani*, *Felder.*
17. — *candiope*, *Godart.*
18. *Hypolimnas misippus*, *Linn.*, ♀ = *inaria*, *Cram.*
19. *Euralia wahlbergi*, *Wallgr.*
20. — *mima* var., *Trimen.*
21. *Junonia scamaus*, *Trimen.*
22. — *simia*, *Wallgr.*
23. — *galami*, *Boisd.*
24. — *elgina*, *Hewits.*
25. — *arfaxia*, *Hewits.*, and var. *nachtigalii*, *Dewitz.*
26. — *boopis*, *Trimen.*
27. — *clelia*, *Cramer.*
28. — *cebrene*, *Trimen.*
29. — *natalica*, *Felder.*
30. *Protognomiomorpha anacardi*, *Linn.*
31. *Euphadra neophron*, *Hopff.*
32. *Euryphene cocalia*, *Fabr.*
33. *Pseudargynnis hegemon*, *Godt.*
34. *Metacrenis rosa*, *Hewits.*
35. — *crawshayi*, *Butl.*
36. *Hamanumida duadalu*, *Fabr.*
37. *Catuna crithea*, *Drury.*
38. *Neptis agatha*, *Cramer.*
39. *Atella columbina*, *Cramer.*
40. *Byblia vulgaris*, *Staud.*
41. *Acraea cabira*, *Hopff.*
42. — *serena*, *Fabr.*, var. *perrupta*, *Butler.*
43. — *natalica*, *Boisd.*
44. *Alaena nyassæ*, var., *Hewits.*
45. *Polyommatus bæticus*, *Linn.*
46. *Catochrysops osiris*, *Hopff.*
47. *Azanus occidentalis*, *Butler.*
48. *Tarucus plinius*, *Fabr.*
49. *Nacaduba sichela*, *Wallgr.*
50. *Castalius calice*, *Hopff.*
51. *Lycænesthes hodes*, *Hewits.*
52. *Zizera knysna*, *Trimen.*
53. — *lucida*, *Trimen.*
54. *Lachnocnema bibulus*, *Fabr.*
55. *Spindasis nyassæ*, *Butler.*
56. *Virachola anta*, *Trimen.*
57. *Iolaus buxtoni*, *Hewits.*
58. — *cæculus*, *Hopff.*
59. *Myrina ficcudula* ♀, *Trimen.*
- \*61. — *yulei*, *Butler.*
62. *Torias zoc*, *Hopff.*
63. — *regularis*, *Butl.*
64. — *leonis*, *Butl.*
65. — *orientis*, *Butl.*
66. *Teraeolus opalescens*, *Butl.*, and dry-season males.
67. — *hildebrandtii* ♂, *Staud.*
68. — *subfasciatus*, *Swinson*, dry-season female.
69. — *anax*, *Grose Smith.*
70. — *stipylus* ♂, *Swinhoe.*
71. — *omphale*, *Godart.*
72. — *emini*, *Butler*, dry- and wet-season forms, ♂♂.
73. *Catopsilia florella*, *Fabr.* Three named varieties.
74. *Belenois thysa*, *Hopff.*
75. — *calypso*, *Drury.*
76. — *crawshayi* ♂, *Butl.*, and dry-season form *diminuta* ♂.
77. — *incertina*, *Cram.*
78. — *severina* ♂, *Cram.*
- \*79. *Phrissura nyasana*, *Butler.*
80. *Herpania eriphia*, *Godt.*
81. *Papilio polioeas*, *Cram.*
82. — *lurinus*, *Butler.*
83. — *porthaon*, *Hewits.*
84. — *pylades*, *Fabr.*
85. — *nivinox*, *Butler.*
86. — *similis*, *Cramer.*
87. — *demoleus*, *Linn.*
88. *Osmodes rauha*, *Westw.*
89. *Cyclopides willlemi*, *Wallgr.*

## HETEROCERA.

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| 90. <i>Cherocampa osiris</i> , <i>Dalm.</i>        | 99. <i>Acontia graellsii</i> , <i>Feisth.</i>  |
| 91. <i>Daphnis nerii</i> , <i>Linn.</i>            | 100. <i>Cyligramma latona</i> , <i>Cramer.</i>   |
| 92. <i>Nephela accentifera</i> , <i>Beauv.</i>     | 101. — <i>rudilinea</i> , <i>Walk.</i>   |
| *93. <i>Antipheila atrinotata</i> , <i>Butler.</i> | *102. <i>Fodina johnstoni</i> , <i>Butler.</i>   |
| 94. <i>Deiopeia pulchella</i> , <i>Linn.</i>       | 103. <i>Glyphodes sinuata</i> , <i>Fabr.</i>   |
| 95. <i>Argina leonina</i> , <i>Walk.</i>           | 104. <i>Gonodeta zombina</i> , <i>Butler.</i>  |
| 96. <i>Egybolia vaillantina</i> , <i>Stoll.</i>    | 105. <i>Comibana</i> ? sp. (much rubbed;<br>possibly <i>Thalassodes scissaria</i> ,<br>Feld.). |
| 97. <i>Hibrildes norax</i> , <i>Druce.</i>         |  |
| *98. <i>Phægorista zebra</i> , <i>Butler.</i>      |  |

In this list the new forms are indicated by an asterisk; these I now proceed to describe:—

*PHYSCENURA PIONE*, var. *LUCIDA*. (Plate XLIII. fig. 1.)

Differs from typical *P. pione*, of which we have a good series, in the larger white area on the upper surface of the primaries, the black internal streak being abbreviated or even sometimes almost obliterated, so that the lobe extending from the white area towards inner margin is of at least double the width: on the under surface the black striae are wider apart, far less numerous, and the yellow ocelli are paler; the three black lines on outer border are not equidistant as in typical *P. pione*, the two inner ones being nearer together. Expanse of wings, ♂ 39 millim., ♀ 45.

Two males and one female.

It is possible that this form may prove constant to locality: it is probably from near Fort Sengwe, N.W. Nyasa. We have received typical *P. pione* only from Zomba and Deep Bay.

*MYLOTHERIS YULBI*, sp. n. (Plate XLIII. fig. 2.)

♂. Above milky white, slightly tinted with primrose-yellow at the base; apical border, a very slender marginal line, and a dot at extremity of second median branch black; costal border towards base irrorated with blackish; secondaries with black marginal dots at extremities of median branches and submedian vein: primaries below golden orange (or cadmium-yellow) to middle of cell; apical area washed diffusely with saffron-yellowish; seven marginal black dots, the last, at extremity of first median branch, very small: secondaries creamy buff, yellower at base, the costal areolet cadmium-yellow; six black marginal spots, the smallest being the fifth from anal angle or that at extremity of radial nervure: body normal. Expanse of wings 51 millim.

The female, which I formerly supposed to be a pale variety of *M. rueppellii*, differs chiefly on the upper surface in the pale saffron flush at the base of the primaries and the still paler tint at base of secondaries: on the under surface it agrees very nearly with the male. Expanse of wings 59 millim.

The female example in the Museum is from Kilima-njaro.

*PHRISSURA NYASANA*, sp. n. (Plate XLIII. fig. 3.)

An exact copy of *Mylothris rueppellii*: differing chiefly in its

broader wings, the presence of the apical subcostal bifurcation, and in the form and greater intensity of the apical marginal black spots: wings above milk-white; primaries with the basal third bright cadmium-yellow bordered with gamboge; costal border irrorated with black; apical border narrowly pearl-grey, the apical furca and a series of triangular spots terminating the nervures intense black: secondaries faintly tinted with yellow at the base; a marginal series of eight intensely black spots: body normal. Primaries below white, with extreme costal margin and dots at extremities of nervures black; base almost to end of cell brilliant orange edged with yellow; apical border creamy buff: secondaries creamy buff, palest over end of cell, base suffused with orange, the costal areole brilliant orange, external border washed with deep buff; black spots as above: body whitish. Expanse of wings 64 millim.

Two males.

The following Heterocera are new:--

#### LIPARIDÆ.

*ANTIPHELLA ATRINOTATA*, sp. n. (Plate XLIII. fig. 5.)

Pearl-white, wings semitransparent; primaries with three sub-apical spots in a slightly curved series parallel to outer margin and two spots placed obliquely near external angle, all blackish and very small; costal margin also black, very distinctly so at basal third; antennæ pale testaceous; body of similar colouring, but densely irrorated, rather than clothed, with white scales: under surface as above. Expanse of wings 34 millim.

One male.

#### NYCTEMERIDÆ.

*PILÆGORISTA ZEBRA*, sp. n. (Plate XLIII. fig. 4.)

♂. Like *P. similis*, Walk. (= *helcoides*, Dewitz), but the sub-apical patch on the black area of primaries broad and almost wholly ochreous as in *P. formosa*, the spot towards external angle also ochreous; secondaries orange-vermilion, with the usual black border and white-chequered fringe: body as in *P. similis*. Expanse of wings 71 millim.

One male.

#### NOCTUIDÆ.

*FODINA JOHNSTONI*, sp. n. (Plate XLIII. fig. 6.)

Close to *F. albicincta*, but with the primaries more closely resembling those of *F. postmaculata* in pattern, the wing being crossed as in that species by an oblique buff band ending at external angle in a greyish lobe; outer margin also buff; fringe greyish. Expanse of wings 17 millim.

One rather poor example.

This is doubtless the African representative of the Ceylonese *F. postmaculata*, from which the more buff-tinted markings of the

primaries and smoky-brown secondaries with oblique ochreous subanal line to outer margin readily distinguish it.

EXPLANATION OF PLATE XLIII.

- Fig. 1. *Physcænura pionic*, var. *lucida*, ♂, p. 853.  
Fig. 2. *Mylothris yulii*, ♂, p. 853.  
Fig. 3. *Phrissura nyasana*, ♂, p. 853.  
Fig. 4. *Phægorista zebra*, ♂, p. 854.  
Fig. 5. *Antiphella atrinotata*, ♂, p. 854.  
Fig. 6. *Fodina johnstoni*, ♂, p. 854.

December 1, 1896.

Sir W. H. FLOWER, K.C.B., LL.D., F.R.S., President,  
in the Chair.

Mr. R. E. Holding exhibited (on behalf of Sir Robert Harvey, Bart.) the head of a three-horned Fallow Deer (*Dama vulgaris*), and pointed out in his remarks that it was a good illustration of the complete bifurcation of the entire beam of the right horn—the anterior portion carrying a small frontal tine, the second tine, and portion of the palm; while the posterior beam, starting from an independent burr at the base of the horn, carried the characteristic



Head of three-horned Fallow Deer.

back tine and a larger portion of the serrated palm: the left horn being of normal growth.

Mr. Holding also exhibited a singular case of complete symmetrical deformity in a pair of Roebuck's horns.

Mr. H. E. Dresser, at the request of Mr. Thos. Southwell of Norwich, exhibited a specimen of Pallas's Willow-Warbler (*Phylloscopus proregulus*), which he believed to be the first example of this species recorded as having been obtained in Great Britain. It had been shot at Cley-next-the-Sea, Norfolk, by the son-in-law of Mr. H. N. Pashley, on the 31st October last, who at once informed Mr. Southwell that he had a new Warbler and promised to send it to him so soon as it was dry enough. Directly he received it Mr. Southwell forwarded it on to Mr. Dresser. The scrub at Cley, the spot where it was shot, was the place which had yielded so many rare migrants, the last of which was the Aquatic Warbler, and there also Mr. Pashley had obtained this specimen.

Pallas's Willow-Warbler, though it occurred annually on the western slopes of the Ural, had only hitherto with certainty been known to occur further west on the island of Heligoland, where one was obtained in October 1845, and another was said to have been seen, but not obtained, in October 1875.

Mr. Gütke had proposed to separate the form breeding in Siberia from that breeding in the Himalayas, but Mr. Dresser, for reasons stated in his Supplement to the 'Birds of Europe,' p. 75, could not confirm this view. The present specimen, he remarked, agreed closely with an adult bird in his collection obtained at Kultuk, in Siberia, in the month of September.

The following papers were read:—

1. Notes on a Collection of Reptiles and Batrachians made in the Malay Peninsula in 1895-96; with a List of the Species recorded from that Region. By STANLEY SMYTH FLOWER, 5th Fusiliers.<sup>1</sup>

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(Plates XLIV.-XLVI.)

Since Dr. Cantor published his 'Catalogue of Reptiles inhabiting the Malayan Peninsula and Islands' in 1847, no general list has appeared: in his Catalogue mention is made of 106 species of Reptiles and Batrachians; in this paper 210 species are listed. Our knowledge of the herpetological fauna of Malaya since Cantor's time has been added to principally in two valuable papers by Stoliczka in the Journal of the Asiatic Society of Bengal (1870, vol. xxxix, part ii. pp. 134-228, and 1873, vol. xlii, part ii. pp. 111-126), and by collections received in the British Museum from

<sup>1</sup> Communicated by the PRESIDENT.